

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Canceled)
10. (Canceled)
11. (Canceled)

12. (Currently amended) A method for data extraction from a data stream containing at least one data packet, comprising the steps of:

comparing a bit stream derived from a received digital data stream with an expected bit sequence to determine a correlation value for detecting a data packet;

starting data extraction from the bit stream when the correlation value exceeds a threshold value indicating that a data packet has been detected;

storing the correlation value that exceeds the threshold value as a maximum correlation value for use as a new threshold value;

continuing comparing the received bit stream with the expected bit sequence to determine a new correlation value; and

restarting data extraction from the bit stream when the new correlation value exceeds the stored maximum correlation value.

13. (Previously presented) The method as claimed in claim 12, wherein the threshold value is a programmable value.

14. (Previously presented) The method as claimed in claim 12, wherein the correlation value is stored as the maximum correlation value each time data extraction is started

or restarted and the new correlation value continuously determined after starting or restarting data extraction is compared with the stored maximum correlation value.

15. (Previously presented) The method as claimed in claim 12, wherein data extracted prior to restarting data extraction is rejected.

16. (Previously presented) The method as claimed in claim 12, wherein after detecting a data packet an initial timing estimate is determined prior to starting data extraction that synchronizes sampling of bits from a data stream for data extraction with data stream symbols.

17. (Previously presented) The method as claimed in claim 16, wherein timing of the sampling of bits is continuously tracked by comparing timing of symbols within an oversampled bitstream with actual timing of the sampling of bits and correcting the timing of the sampling of bits if a deviation between the timing of the sampling of bits and the timing of the symbols exceeds a value.

18. (Currently amended) A device for data extraction from a data stream containing at least one data packet, comprising:

a data extraction unit for extracting data from a received data stream;

a packet detector for comparing a bit stream derived from a received digital data stream with an expected bit sequence to determine a correlation value for detecting a data packet, the packet detector comprising means for comparing the received bit stream with the expected bit sequence after starting data extraction to determine a new correlation value; and

a sync-control module for receiving the correlation value from the packet detector, the sync-control module controlling the data extraction unit for starting or restarting data extraction from the bit stream when the correlation value exceeds a threshold value or a stored maximum correlation value indicating that a data packet has been detected, and for storing the correlation value that exceeds the threshold value as maximum correlation value for use as a new threshold value.

19. (Previously presented) The device as claimed in claim 18, wherein the device comprises an initial timing estimator which receives the digital data stream for determining an initial timing estimate prior to starting data extraction for synchronizing data extraction with data stream symbols, the initial timing estimate being output to the sync-control module.

20. (Previously presented) The device as claimed in claim 18, wherein the data extraction unit comprises a DC estimator deriving a DC estimate from the received data stream, a comparator for performing a bit decision on data of the received data stream to derive an oversampled bit stream, the comparator including first and second inputs for receiving the DC estimate from the DC estimator and the data stream, respectively, and a sample-and-hold module for sampling the oversampled bit stream received from the comparator.

21. (Previously presented) The device as claimed in claim 20, wherein the data extraction unit comprises a timing estimator for receiving the oversampled bit stream output by the comparator for tracking the initial timing and for controlling the sample-and-hold module.

22. (Previously presented) The method of claim 12 further comprising synchronizing the received bit stream based on the stored maximum correlation value.

23. (Previously presented) The device of claim 18 wherein the sync-control module further synchronizes the received data stream based on the stored maximum correlation value.

24. (Currently amended) A device for data extraction from a data stream containing at least one data packet, comprising:

a data extraction unit for extracting data from a received data stream;

a packet detector for comparing a bit stream derived from a received digital data stream with an expected bit sequence to determine a correlation value for detecting a data packet, the packet detector further configured to compare the received bit stream with the expected bit sequence after starting data extraction to determine a new correlation value; and

a sync-control module for receiving the correlation value from the packet detector, the sync-control module controlling the data extraction unit for starting or restarting data extraction from the bit stream when the correlation value exceeds a threshold value or a stored maximum correlation value indicating that a data packet has been detected, and for storing the correlation value that exceeds the threshold value as maximum correlation value for use as a new threshold value.

25. (Previously presented) The device of claim 24 wherein the sync-control module is further configured to synchronize the received data stream based on the stored maximum correlation value.

26. (Previously presented) The device as claimed in claim 24, wherein the device comprises an initial timing estimator which receives the digital data stream for determining an initial timing estimate prior to starting data extraction for synchronizing data extraction with data stream symbols, the initial timing estimate being output to the sync-control module.

27. (Previously presented) The device as claimed in claim 24, wherein the data extraction unit comprises a DC estimator deriving a DC estimate from the received data stream, a comparator for performing a bit decision on data of the received data stream to derive an oversampled bit stream, the comparator including first and second inputs for receiving the DC estimate from the DC estimator and the data stream, respectively, and a sample-and-hold module for sampling the oversampled bit stream received from the comparator.

28. (Previously presented) The device as claimed in claim 27, wherein the data extraction unit comprises a timing estimator for receiving the oversampled bit stream output by the comparator for tracking the initial timing and for controlling the sample-and-hold module.